My Project

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# **Chapter 1**

# **Hierarchical Index**

# 1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Cell
Facility
Mixer
Truck
Well
Land
Barn
Coop
GrassLand
LinkedList < T >
$\label{linkedList} \mbox{LinkedList} < \mbox{FarmAnimal} * > \dots \dots$
LinkedList< Product *>
LinkedList < SideProduct * >
LinkedList< std::string >
LinkedListNode < T >
LinkedListNode < FarmAnimal * >
LinkedListNode < Product * >
LinkedListNode < SideProduct * >
LinkedListNode < std::string >
LivingThing
FarmAnimal
EggProducer
Chicken
Ostrich
MeatProducer
Cow
Duck
Sheep
MilkProducer
Horse
Player
Point
Product
FormProduct

2 Hierarchical Index

	ChickenEgg			 										 				13
	CowMeat																	
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World															 			56

# **Chapter 2**

# **Class Index**

# 2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Barn	5
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Truck	54
Well	55
World	EG

4 Class Index

# **Chapter 3**

# **Class Documentation**

# 3.1 Barn Class Reference

#include <Barn.h>

Inheritance diagram for Barn:



3.1.1 \*

**Public Member Functions** 

• Category getCategory () const

3.1.2 \*

Additional Inherited Members

# 3.1.3 Detailed Description

Barn merupakan kelas turunan dari Land yang hanya bisa ditempati oleh Player dan MeatProducer

#### 3.1.4 Member Function Documentation

# 3.1.4.1 getCategory()

```
Category Barn::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

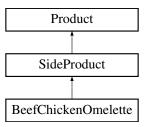
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Barn.h

# 3.2 BeefChickenOmelette Class Reference

#include <BeefChickenOmelette.h>

Inheritance diagram for BeefChickenOmelette:



3.2.1 \*

**Public Member Functions** 

- BeefChickenOmelette ()
- ∼BeefChickenOmelette ()
- int getPrice () const
- Category getCategory () const
- LinkedList< Product \* > & getRecipe ()

3.2.2 \*

Additional Inherited Members

# 3.2.3 Detailed Description

BeefChickenOmelette adalah kelas turunan dari SideProduct yang dihasilkan dengan mix CowMeat dan ChickenEgg

#### 3.2.4 Constructor & Destructor Documentation

#### 3.2.4.1 BeefChickenOmelette()

BeefChickenOmelette::BeefChickenOmelette ( )

Constructor untuk inisialisasi recipe

3.2.4.2 ~BeefChickenOmelette()

BeefChickenOmelette::~BeefChickenOmelette ( )

Dtor

#### 3.2.5 Member Function Documentation

# Category BeefChickenOmelette::getCategory ( ) const [virtual] Mengembalikan category dari produk Implements Product.

# 3.2.5.2 getPrice()

3.2.5.1 getCategory()

```
int BeefChickenOmelette::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

#### 3.2.5.3 getRecipe()

```
LinkedList<Product*>& BeefChickenOmelette::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements SideProduct.

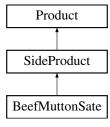
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/BeefChickenOmelette.h

# 3.3 BeefMuttonSate Class Reference

```
#include <BeefMuttonSate.h>
```

Inheritance diagram for BeefMuttonSate:



#### 3.3.1 \*

- BeefMuttonSate ()
- ∼BeefMuttonSate ()
- int getPrice () const
- Category getCategory () const
- LinkedList< Product \* > & getRecipe ()

3.3.2 \*

Additional Inherited Members

#### 3.3.3 Detailed Description

BeefMuttonSate adalah kelas turunan dari SideProduct yang dihasilkan dengan mix CowMeat dan SheepMeat

# 3.3.4 Constructor & Destructor Documentation

```
3.3.4.1 BeefMuttonSate::BeefMuttonSate ( )

Constructor untuk inisialisasi recipe

3.3.4.2 ~BeefMuttonSate()

BeefMuttonSate::~BeefMuttonSate ( )

Dtor

3.3.5 Member Function Documentation

3.3.5.1 getCategory()

Category BeefMuttonSate::getCategory ( ) const [virtual]

Mengembalikan category dari produk

Implements Product.

3.3.5.2 getPrice()

int BeefMuttonSate::getPrice ( ) const [virtual]
```

#### 3.3.5.3 getRecipe()

Implements Product.

```
LinkedList<Product*>& BeefMuttonSate::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements SideProduct.

The documentation for this class was generated from the following file:

• include/EngiFarm/Product/BeefMuttonSate.h

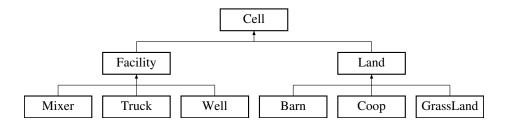
getPrice mengembalikan harga yang didefinisikan

3.4 Cell Class Reference 9

# 3.4 Cell Class Reference

#include <Cell.h>

Inheritance diagram for Cell:



3.4.1 \*

**Public Types** 

enum Category {
 WELL, MIXER, TRUCK, COOP,
 GRASSLAND, BARN }

3.4.2 \*

**Public Member Functions** 

- virtual ∼Cell ()=0
- virtual bool isFacility () const =0
- virtual Category getCategory () const =0
- bool getIsOcupied ()
- void setIsOcupied (bool)
- virtual void growGrass ()
- virtual void removeGrass ()
- virtual bool isGrassExist () const =0

3.4.3 \*

**Protected Attributes** 

bool isOcupied {false}

# 3.4.4 Detailed Description

Cell adalah kelas abstrak yang merepresentasikan petak pada Engi's farm

3.4.5 Member Enumeration Documentation

```
3.4.5.1 Categoryenum Cell::CategoryJenis kategori Cell3.4.6 Constructor & Destructor Documentation
```

```
3.4.6.1 \simCell()
```

```
\label{local_continuity} \mbox{virtual Cell::$$\sim$Cell () [pure virtual]}
```

dtor untuk Cell

3.4.7 Member Function Documentation

```
3.4.7.1 getCategory()
```

```
virtual Category Cell::getCategory ( ) const [pure virtual]
```

Return categori dari objek kategori

Implemented in Truck, Barn, Coop, GrassLand, Mixer, and Well.

```
3.4.7.2 getIsOcupied()
```

```
bool Cell::getIsOcupied ( )
```

Mengambil nilai boolean isOcupied

3.4.7.3 growGrass()

```
virtual void Cell::growGrass ( ) [virtual]
```

Menambah air pada cell. Jika bertipe Land akan menumbuhkan rumput. Jika tidak, tidak akan berefek apa-apa.

Reimplemented in Land.

3.4 Cell Class Reference

#### 3.4.7.4 isFacility()

```
virtual bool Cell::isFacility ( ) const [pure virtual]
```

Return true jika objek adalah Facility

Implemented in Facility, and Land.

#### 3.4.7.5 isGrassExist()

```
virtual bool Cell::isGrassExist ( ) const [pure virtual]
```

Mengembalikan keberadaan grass jika Cell bertipe Land

Implemented in Facility, and Land.

#### 3.4.7.6 setIsOcupied()

Mengganti nilai boolean isOcupied

# 3.4.8 Member Data Documentation

## 3.4.8.1 isOcupied

```
bool Cell::isOcupied {false} [protected]
```

Flag yang menandakan cell ditempati oleh sesuatu (Player/FarmAnimal/Facility) atau tidak. True bila cell sedang ditempati oleh sesuatu.

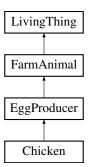
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Cell.h

# 3.5 Chicken Class Reference

```
#include <Chicken.h>
```

Inheritance diagram for Chicken:



3.5.1 \*

**Public Member Functions** 

- Chicken (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.5.2 \*

**Additional Inherited Members** 

# 3.5.3 Detailed Description

Chicken merupakan kelas turunan dari EggProducer yang menghasilkan ChickenEgg saat diinteract

# 3.5.4 Constructor & Destructor Documentation

#### 3.5.4.1 Chicken()

```
Chicken::Chicken (
Point position,
Cell ***& worldMap,
int nRowCell,
int nCollumnCell)
```

Constructor

#### 3.5.5 Member Function Documentation

#### 3.5.5.1 makeNoise()

```
std::string Chicken::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Chicken

Implements FarmAnimal.

#### 3.5.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Chicken bila Chicken di interact

Implements FarmAnimal.

#### 3.5.5.3 render()

```
char Chicken::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Chicken saat Hungry dan tidak Hungry

Implements LivingThing.

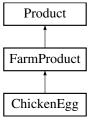
The documentation for this class was generated from the following file:

· include/EngiFarm/FarmAnimal/Chicken.h

# 3.6 ChickenEgg Class Reference

```
#include <ChickenEgg.h>
```

Inheritance diagram for ChickenEgg:



3.6.1 \*

- int getPrice () const
- Category getCategory () const

3.6.2 \*

**Additional Inherited Members** 

# 3.6.3 Detailed Description

ChickenEgg adalah kelas turunan dari FarmProduct yang dihasilkan dengan interact dengan Chicken

#### 3.6.4 Member Function Documentation

```
3.6.4.1 getCategory()
```

```
Category ChickenEgg::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

```
3.6.4.2 getPrice()
```

```
int ChickenEgg::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

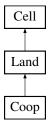
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/ChickenEgg.h

# 3.7 Coop Class Reference

```
#include <Coop.h>
```

Inheritance diagram for Coop:



3.7.1 \*

**Public Member Functions** 

· Category getCategory () const

3.8 Cow Class Reference 15

3.7.2 \*

**Additional Inherited Members** 

# 3.7.3 Detailed Description

Coop merupakan kelas turunan dari Land yang hanya bisa ditempati oleh Player dan EggProducer

# 3.7.4 Member Function Documentation

# 3.7.4.1 getCategory()

```
Category Coop::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

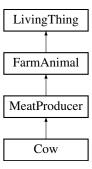
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Coop.h

# 3.8 Cow Class Reference

```
#include <Cow.h>
```

Inheritance diagram for Cow:



3.8.1 \*

- Cow (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.8.2 \*

Additional Inherited Members

# 3.8.3 Detailed Description

Cow merupakan kelas turunan dari MeatProducer yang menghasilkan CowMeat saat dikill

#### 3.8.4 Constructor & Destructor Documentation

```
3.8.4.1 Cow()

Cow::Cow (

Point position,
Cell ***& worldMap,
int nRowCell,
int nCollumnCell)
```

Constructor

# 3.8.5 Member Function Documentation

```
3.8.5.1 makeNoise()
std::string Cow::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Cow

Implements FarmAnimal.

#### 3.8.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Cow bila Cow di kill

Implements FarmAnimal.

```
3.8.5.3 render()
char Cow::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Cow saat Hungry dan tidak Hungry

Implements LivingThing.

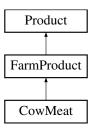
The documentation for this class was generated from the following file:

• include/EngiFarm/FarmAnimal/Cow.h

# 3.9 CowMeat Class Reference

```
#include <CowMeat.h>
```

Inheritance diagram for CowMeat:



3.9.1 \*

**Public Member Functions** 

- int getPrice () const
- Category getCategory () const

3.9.2 \*

**Additional Inherited Members** 

# 3.9.3 Detailed Description

CowMeat adalah kelas turunan dari FarmProduct yang dihasilkan dengan kill Cow

#### 3.9.4 Member Function Documentation

```
3.9.4.1 getCategory()
```

```
Category CowMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

```
3.9.4.2 getPrice()
```

```
int CowMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

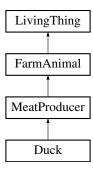
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/CowMeat.h

# 3.10 Duck Class Reference

```
#include <Duck.h>
```

Inheritance diagram for Duck:



3.10.1 \*

**Public Member Functions** 

- Duck (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.10.2 \*

**Additional Inherited Members** 

# 3.10.3 Detailed Description

Duck merupakan kelas turunan dari MeatProducer yang menghasilkan DuckMeat saat diinteract

#### 3.10.4 Constructor & Destructor Documentation

```
3.10.4.1 Duck()
```

Constructor

#### 3.10.5 Member Function Documentation

#### 3.10.5.1 makeNoise()

```
std::string Duck::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Duck

Implements FarmAnimal.

#### 3.10.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Duck bila Duck di kill

Implements FarmAnimal.

#### 3.10.5.3 render()

```
char Duck::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Duck saat Hungry dan tidak Hungry

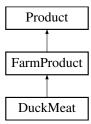
Implements LivingThing.

The documentation for this class was generated from the following file:

• include/EngiFarm/FarmAnimal/Duck.h

# 3.11 DuckMeat Class Reference

Inheritance diagram for DuckMeat:



#### 3.11.1 \*

- int getPrice () const
- Category getCategory () const

# 3.11.2

**Additional Inherited Members** 

#### 3.11.3 Member Function Documentation

# 3.11.3.1 getCategory()

```
Category DuckMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

#### 3.11.3.2 getPrice()

```
int DuckMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

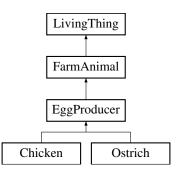
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/DuckMeat.h

# 3.12 EggProducer Class Reference

```
#include <EggProducer.h>
```

Inheritance diagram for EggProducer:



# 3.12.1

- EggProducer (int \_maxTimeToGetHungry, Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- virtual ∼EggProducer ()=0
- bool getProduce ()
- bool getKillable ()

3.12.2 \*

**Protected Attributes** 

• bool canProduce {false}

3.12.3 \*

Additional Inherited Members

# 3.12.4 Detailed Description

EggProducer merupakan kelas abstrak turunan dari FarmAnimal yang tinggal di Coop dan menghasilkan Egg saat diinteract

# 3.12.5 Constructor & Destructor Documentation

## 3.12.5.1 EggProducer()

```
EggProducer::EggProducer (
    int _maxTimeToGetHungry,
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor maxTimeToGetHungry dengan nilai H

```
3.12.5.2 \sim EggProducer()
```

```
virtual EggProducer::~EggProducer ( ) [pure virtual]
```

Penerusan overloading (virtual) destruktor

#### 3.12.6 Member Function Documentation

```
3.12.6.1 getKillable()
```

```
bool EggProducer::getKillable ( ) [virtual]
```

Mengembalikan false karena EggProducer tidak bisa di kill

Implements FarmAnimal.

#### 3.12.6.2 getProduce()

```
bool EggProducer::getProduce ( ) [virtual]
```

Mengembalikan nilai dari canProduce

Implements FarmAnimal.

#### 3.12.7 Member Data Documentation

#### 3.12.7.1 canProduce

```
bool EggProducer::canProduce {false} [protected]
```

Menentukan apakah FarmAnimal dapat menghasilkan produk apabila diinteract

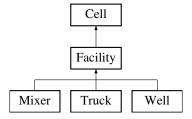
The documentation for this class was generated from the following file:

· include/EngiFarm/FarmAnimal/EggProducer.h

# 3.13 Facility Class Reference

```
#include <Facility.h>
```

Inheritance diagram for Facility:



# 3.13.1 \*

- Facility ()
- virtual ∼Facility ()=0
- bool isFacility () const
- bool isGrassExist () const

3.13.2 \*

Additional Inherited Members

#### 3.13.3 Detailed Description

Facility merupakan kelas turunan dari Cell yang menampung utilitas untuk Player yaitu Truck, Mixer, dan Well dan tidak bisa ditempati oleh LivingThing

#### 3.13.4 Constructor & Destructor Documentation

```
3.13.4.1 Facility()
Facility::Facility ( )
Constructor untuk set isOcupied jadi true
3.13.4.2 ~Facility()
virtual Facility::~Facility ( ) [pure virtual]
```

#### 3.13.5 Member Function Documentation

```
3.13.5.1 isFacility()
bool Facility::isFacility ( ) const [virtual]
```

Return true bila Land adalah sebuah facility

Implements Cell.

Destructor Land

```
3.13.5.2 isGrassExist()
```

```
bool Facility::isGrassExist ( ) const [virtual]
```

Mengembalikan false

Implements Cell.

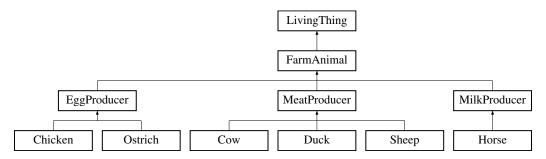
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Facility.h

# 3.14 FarmAnimal Class Reference

#include <FarmAnimal.h>

Inheritance diagram for FarmAnimal:



#### 3.14.1 \*

#### **Public Types**

• enum Action { INTERACT, KILL }

## 3.14.2 \*

# **Public Member Functions**

- FarmAnimal (int \_maxTimeToGetHungry, Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- virtual ∼FarmAnimal ()=0
- void tick ()
- virtual FarmProduct \* produceProduct (Action)=0
- virtual std::string makeNoise () const =0
- bool isDead () const
- virtual bool getProduce ()=0
- virtual bool getKillable ()=0

# 3.14.3 \*

#### Protected Member Functions

- · virtual void eat ()
- bool isHungry () const

#### 3.14.4 \*

#### **Protected Attributes**

- int timeToGetHungry
- const int maxTimeToGetHungry

## 3.14.5 Detailed Description

kelas FarmAnimal merupakan kelas turunan dari living thing yang dapat berupa EggProducer,MilkProducer,dan MeatProducer

#### 3.14.6 Member Enumeration Documentation

#### 3.14.6.1 Action

```
enum FarmAnimal::Action
```

Jenis aksi yang dapat dilakukan ke FarmAnimal

#### 3.14.7 Constructor & Destructor Documentation

## 3.14.7.1 FarmAnimal()

Constructor maxTimeToGetHungry dengan nilai H

#### 3.14.7.2 $\sim$ FarmAnimal()

```
virtual FarmAnimal::~FarmAnimal ( ) [pure virtual]
```

Destructor FarmAnimal

#### 3.14.8 Member Function Documentation

```
3.14.8.1 eat()
```

```
virtual void FarmAnimal::eat ( ) [protected], [virtual]
```

Jika FarmAnimal sedang berdiri pada land dengan rumput, maka timeToDeath di set nilai semula dan timeToGdengan nilai sesuai dengan derived classnya, lalu grass di land dihapus

## 3.14.8.2 getKillable()

```
virtual bool FarmAnimal::getKillable ( ) [pure virtual]
```

Mengembalikan true jika FarmAnimal bisa di Kill untuk menghasilkan Product

Implemented in MilkProducer, EggProducer, and MeatProducer.

```
3.14.8.3 getProduce()
virtual bool FarmAnimal::getProduce ( ) [pure virtual]
Mengembalikan true jika FarmAnimal bisa di Interact untuk menghasilkan Product
Implemented in MeatProducer, MilkProducer, and EggProducer.
3.14.8.4 isDead()
bool FarmAnimal::isDead ( ) const
Mengembalikan true jika timeToDeath == 0, lalu di destruct di main atau di class world
3.14.8.5 isHungry()
bool FarmAnimal::isHungry ( ) const [protected]
return true apabila timeToGetHungry <= 0
3.14.8.6 makeNoise()
virtual std::string FarmAnimal::makeNoise ( ) const [pure virtual]
Mengembalikan suara dari FarmAnimal
Implemented in Chicken, Cow, Duck, Horse, Ostrich, and Sheep.
3.14.8.7 produceProduct()
virtual FarmProduct* FarmAnimal::produceProduct (
              Action ) [pure virtual]
Mengembalikan produk yang dihasilkan FarmAnimal apabila diinteract/dikill
Implemented in Chicken, Cow, Duck, Horse, Ostrich, and Sheep.
3.14.8.8 tick()
void FarmAnimal::tick ( )
Melakukan aksi yang dilakukan FarmAnimal setiap satuan waktu
3.14.9 Member Data Documentation
3.14.9.1 maxTimeToGetHungry
const int FarmAnimal::maxTimeToGetHungry [protected]
Nilai max dari timeToGetHungry
3.14.9.2 timeToGetHungry
int FarmAnimal::timeToGetHungry [protected]
Waktu FarmAnimal sampai menjadi lapar
```

The documentation for this class was generated from the following file:

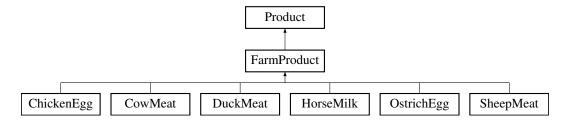
include/EngiFarm/FarmAnimal/FarmAnimal.h

Generated by Doxygen

# 3.15 FarmProduct Class Reference

#include <FarmProduct.h>

Inheritance diagram for FarmProduct:



3.15.1

Additional Inherited Members

# 3.15.2 Detailed Description

Product yang didapat dari hasil interact / kill

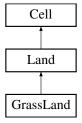
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/FarmProduct.h

# 3.16 GrassLand Class Reference

#include <GrassLand.h>

Inheritance diagram for GrassLand:



3.16.1 \*

**Public Member Functions** 

• Category getCategory () const

3.16.2

Additional Inherited Members

# 3.16.3 Detailed Description

GrassLand merupakan kelas turunan dari Land yang hanya bisa ditempati oleh Player dan MilkProducer

## 3.16.4 Member Function Documentation

# 3.16.4.1 getCategory()

```
Category GrassLand::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

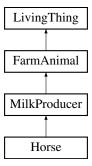
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/GrassLand.h

# 3.17 Horse Class Reference

```
#include <Horse.h>
```

Inheritance diagram for Horse:



3.17.1 \*

Public Member Functions

- Horse (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.17.2 \*

Additional Inherited Members

# 3.17.3 Detailed Description

Horse merupakan kelas turunan dari MilkProducer yang menghasilkan HorseMilk saat diinteract

#### 3.17.4 Constructor & Destructor Documentation

#### 3.17.4.1 Horse()

Constructor

## 3.17.5 Member Function Documentation

```
3.17.5.1 makeNoise()
```

```
std::string Horse::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Horse

Implements FarmAnimal.

#### 3.17.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Horse bila Horse di interact

Implements FarmAnimal.

```
3.17.5.3 render()
```

```
char Horse::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Horse saat Hungry dan tidak Hungry

Implements LivingThing.

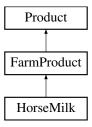
The documentation for this class was generated from the following file:

include/EngiFarm/FarmAnimal/Horse.h

# 3.18 HorseMilk Class Reference

```
#include <HorseMilk.h>
```

Inheritance diagram for HorseMilk:



3.18.1 \*

**Public Member Functions** 

- int getPrice () const
- Category getCategory () const

3.18.2 \*

**Additional Inherited Members** 

# 3.18.3 Detailed Description

HorseMilk adalah kelas turunan dari FarmProduct yang dihasilkan dengan interact dengan Horse

## 3.18.4 Member Function Documentation

```
3.18.4.1 getCategory()
```

```
Category HorseMilk::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

```
3.18.4.2 getPrice()
```

```
int HorseMilk::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

The documentation for this class was generated from the following file:

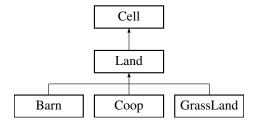
• include/EngiFarm/Product/HorseMilk.h

3.19 Land Class Reference 31

# 3.19 Land Class Reference

#include <Land.h>

Inheritance diagram for Land:



3.19.1 \*

**Public Member Functions** 

- virtual ∼Land ()=0
- bool isFacility () const
- void growGrass ()
- void removeGrass ()
- bool isGrassExist () const

3.19.2 \*

Additional Inherited Members

# 3.19.3 Detailed Description

Land merupakan kelas turunan dari Cell yang merepresentasikan petak-petak yang bisa ditempati oleh LivingThing

# 3.19.4 Constructor & Destructor Documentation

```
3.19.4.1 \simLand() virtual Land::\simLand ( ) [pure virtual]
```

## 3.19.5 Member Function Documentation

```
3.19.5.1 growGrass()
void Land::growGrass ( ) [virtual]
```

Destructor Land

Membuat existGrass menjadi true

Reimplemented from Cell.

## 3.19.5.2 isFacility()

```
bool Land::isFacility ( ) const [virtual]
```

Return true bila Land adalah sebuah facility

Implements Cell.

#### 3.19.5.3 isGrassExist()

```
bool Land::isGrassExist ( ) const [virtual]
```

Mengembalikan keberadaan grass

Implements Cell.

The documentation for this class was generated from the following file:

· include/EngiFarm/Cell/Land.h

# 3.20 LinkedList < T > Class Template Reference

```
#include <LinkedList.h>
```

3.20.1 \*

**Public Member Functions** 

- LinkedList ()
- LinkedList (std::initializer\_list< T > args)
- LinkedList (const LinkedList< T > &I)
- ∼LinkedList ()
- LinkedList< T > & operator= (const LinkedList< T > &I)
- int find (T elm)
- int findPointer (T elm)
- bool isEmpty () const
- void add (T elm)
- void remove (T elm)
- void removeldx (int idx)
- T & get (int idx)
- T & operator[] (int idx)
- void print ()
- int len ()

# 3.20.2 Detailed Description

```
template < class T > class LinkedList < T >
```

Tipe data LinkedList, diimplementasi secara rekursif dengan LinkedListNode

#### 3.20.3 Constructor & Destructor Documentation

```
3.20.3.1 LinkedList() [1/3]
template<class T >
LinkedList< T >::LinkedList ( )
```

Konstruktor default LinkedList, membuat empty list

Konstruktor dengan initializer list

**3.20.3.3 LinkedList()** [3/3]

Copy constructor LinkedList

```
3.20.3.4 \simLinkedList()
```

```
template<class T > LinkedList<br/>< T >::~LinkedList ( )
```

Destructor LinkedList

#### 3.20.4 Member Function Documentation

Menambah elm sebagai elemen terakhir

```
3.20.4.2 find()
```

Mencari indeks pertama dari elm dari LinkedList. Jika tidak ada, bernilai -1.

```
3.20.4.3 get()
```

Mengembalikan elemen berindeks idx. Jika diluar range, melempar "Index out of range".

#### 3.20.4.4 isEmpty()

```
template<class T >
bool LinkedList< T >::isEmpty ( ) const
```

Mengembalikan apakah list empty atau tidak

#### 3.20.4.5 len()

```
template<class T >
int LinkedList< T >::len ( )
```

Mengembalikan panjang dari list

#### 3.20.4.6 operator=()

Operator= LinkedList

## 3.20.4.7 operator[]()

Mengembalikan reference ke elemen berindeks idx. Jika diluar range, melempar "Index out of range".

## 3.20.4.8 print()

```
template<class T >
void LinkedList< T >::print ( )
```

Menampilkan isi dar list ke layar

#### 3.20.4.9 remove()

Menghapus keberadaan pertama elm

## 3.20.4.10 removeldx()

Menghapus elemen berindeks idx. Jika diluar range, melempar "Index out of range".

The documentation for this class was generated from the following file:

• include/EngiFarm/LinkedList.h

# 3.21 LinkedListNode < T > Class Template Reference

```
#include <LinkedList.h>
3.21.1 *
```

**Public Member Functions** 

- LinkedListNode (T \_head, LinkedListNode < T > \*\_next=nullptr)
- ∼LinkedListNode ()

3.21.2 \*

**Public Attributes** 

friend LinkedList< T >

# 3.21.3 Detailed Description

```
template < class T > class LinkedListNode < T >
```

LinkedList adalah kelas generik yang merepresentasikan daftar suatu objek Forward declaration dari kelas LinkedListNode

Anggota kelas implementasi LinkedList secara rekursifs

## 3.21.4 Constructor & Destructor Documentation

#### 3.21.4.1 LinkedListNode()

Konstruktor LinkedListNode dengan argume, deafult tail = nullptr

## 3.21.4.2 ~LinkedListNode()

```
\label{template} $$ $$ template < class T > $$ LinkedListNode < T > :: \sim LinkedListNode ( )
```

dtor

## 3.21.5 Member Data Documentation

```
3.21.5.1 LinkedList< T >
template < class T>
```

```
friend LinkedListNode< T >::LinkedList< T >
```

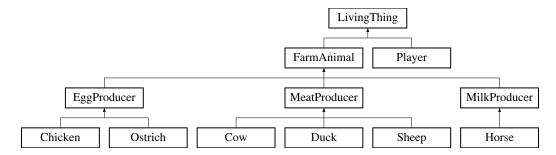
Membuat LinkedList dapat mengakses head dan tail

The documentation for this class was generated from the following file:

• include/EngiFarm/LinkedList.h

# 3.22 LivingThing Class Reference

Inheritance diagram for LivingThing:



3.22.1

**Public Member Functions** 

- LivingThing (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- virtual ~LivingThing ()=0
- Point getPosition () const
- void move (Direction toWhere)
- virtual char render ()=0

3.22.2 \*

**Protected Attributes** 

- Cell \*\*\*& worldMap
- int nRowCell
- int nCollumnCell

#### 3.22.3 Constructor & Destructor Documentation

```
3.22.3.1 LivingThing()
```

```
LivingThing::LivingThing (
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell)
```

## Constructor LivingThing

#### 3.22.3.2 $\sim$ LivingThing()

```
virtual LivingThing::~LivingThing ( ) [pure virtual]
```

Destructor dari LivingThing

# 3.22.4 Member Function Documentation

```
3.22.4.1 getPosition()
```

```
Point LivingThing::getPosition ( ) const
```

Mengembalikan position

## 3.22.4.2 move()

Berpindah ke suatu lokasi. Apabila tidak bisa (!canMoveTo), throw "Cannot move to the direction".

## 3.22.4.3 render()

```
virtual char LivingThing::render ( ) [pure virtual]
```

Mengembalikan char untuk dirender ke layar

Implemented in Player, Chicken, Cow, Duck, Horse, Ostrich, and Sheep.

## 3.22.5 Member Data Documentation

#### 3.22.5.1 nCollumnCell

```
int LivingThing::nCollumnCell [protected]
```

Nilai efektif kolom untuk Matriks Cell

## 3.22.5.2 nRowCell

```
int LivingThing::nRowCell [protected]
```

Nilai efektif baris untuk Matriks Cell

## 3.22.5.3 worldMap

```
Cell***& LivingThing::worldMap [protected]
```

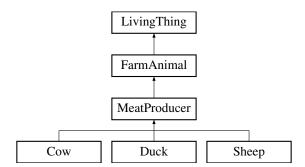
Representasi dunia tempat LivingThing tinggal

The documentation for this class was generated from the following file:

• include/EngiFarm/LivingThing.h

# 3.23 MeatProducer Class Reference

Inheritance diagram for MeatProducer:



## 3.23.1 \*

**Public Member Functions** 

- MeatProducer (int \_maxTimeToGetHungry, Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- virtual ∼MeatProducer ()=0
- bool getKillable ()
- bool getProduce ()

3.23.2 \*

Additional Inherited Members

## 3.23.3 Constructor & Destructor Documentation

#### 3.23.3.1 MeatProducer()

```
MeatProducer::MeatProducer (
    int _maxTimeToGetHungry,
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor maxTimeToGetHungry dengan nilai H

```
3.23.3.2 ~MeatProducer()
```

```
virtual MeatProducer::~MeatProducer ( ) [pure virtual]
```

Penerusan overloading (virtual) destruktor

# 3.23.4 Member Function Documentation

# 3.23.4.1 getKillable()

```
bool MeatProducer::getKillable ( ) [virtual]
```

Mengembalikan nilai dari killable

Implements FarmAnimal.

## 3.23.4.2 getProduce()

```
bool MeatProducer::getProduce ( ) [virtual]
```

Mengembalikan false karena MeatProducer tidak bisa di Interact

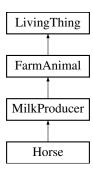
Implements FarmAnimal.

The documentation for this class was generated from the following file:

include/EngiFarm/FarmAnimal/MeatProducer.h

# 3.24 MilkProducer Class Reference

Inheritance diagram for MilkProducer:



3.24.1 \*

**Public Member Functions** 

- MilkProducer (int \_maxTimeToGetHungry, Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- virtual ∼MilkProducer ()=0
- bool getProduce ()
- bool getKillable ()

3.24.2

**Protected Attributes** 

• bool canProduce = false

3.24.3 \*

Additional Inherited Members

# 3.24.4 Constructor & Destructor Documentation

## 3.24.4.1 MilkProducer()

```
MilkProducer::MilkProducer (
    int _maxTimeToGetHungry,
    Point position,
    Cell ***& worldMap,
    int nRowCell,
    int nCollumnCell )
```

Constructor maxTimeToGetHungry dengan nilai H

3.25 Mixer Class Reference 41

#### 3.24.4.2 $\sim$ MilkProducer()

virtual MilkProducer::~MilkProducer ( ) [pure virtual]

Penerusan overloading (virtual) destruktor

#### 3.24.5 Member Function Documentation

#### 3.24.5.1 getKillable()

```
bool MilkProducer::getKillable ( ) [virtual]
```

Mengembalikan false karena MilkProducer tidak bisa di kill

Implements FarmAnimal.

## 3.24.5.2 getProduce()

```
bool MilkProducer::getProduce ( ) [virtual]
```

Mengembalikan nilai dari canProduce

Implements FarmAnimal.

#### 3.24.6 Member Data Documentation

#### 3.24.6.1 canProduce

```
bool MilkProducer::canProduce = false [protected]
```

Menentukan apakah FarmAnimal dapat menghasilkan produk apabila diinteract

The documentation for this class was generated from the following file:

· include/EngiFarm/FarmAnimal/MilkProducer.h

# 3.25 Mixer Class Reference

```
#include <Mixer.h>
```

Inheritance diagram for Mixer:



# 3.25.1 \*

## **Public Member Functions**

Category getCategory () const

3.25.2

**Additional Inherited Members** 

# 3.25.3 Detailed Description

Mixer merupakan kelas turunan dari Facility yang digunakan untuk membuat SideProduct

# 3.25.4 Member Function Documentation

# 3.25.4.1 getCategory()

```
Category Mixer::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

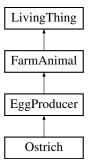
The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Mixer.h

# 3.26 Ostrich Class Reference

```
#include <Ostrich.h>
```

Inheritance diagram for Ostrich:



3.26.1

Public Member Functions

- Ostrich (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.26.2 \*

Additional Inherited Members

# 3.26.3 Detailed Description

Ostrich merupakan kelas turunan dari EggProducer yang menghasilkan OstrichEgg saat diinteract

#### 3.26.4 Constructor & Destructor Documentation

#### 3.26.4.1 Ostrich()

Constructor

## 3.26.5 Member Function Documentation

```
3.26.5.1 makeNoise()
```

```
std::string Ostrich::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Chicken

Implements FarmAnimal.

#### 3.26.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Ostrich bila Ostrich di interact

Implements FarmAnimal.

```
3.26.5.3 render()
```

```
char Ostrich::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Ostrich saat Hungry dan tidak Hungry

Implements LivingThing.

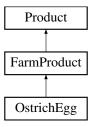
The documentation for this class was generated from the following file:

• include/EngiFarm/FarmAnimal/Ostrich.h

# 3.27 OstrichEgg Class Reference

#include <OstrichEgg.h>

Inheritance diagram for OstrichEgg:



3.27.1 \*

**Public Member Functions** 

- int getPrice () const
- Category getCategory () const

3.27.2 \*

**Additional Inherited Members** 

# 3.27.3 Detailed Description

OstrichEgg adalah kelas turunan dari FarmProduct yang dihasilkan dengan interact dengan Ostrich

## 3.27.4 Member Function Documentation

```
3.27.4.1 getCategory()
```

```
Category OstrichEgg::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

```
3.27.4.2 getPrice()
```

```
int OstrichEgg::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

The documentation for this class was generated from the following file:

· include/EngiFarm/Product/OstrichEgg.h

# 3.28 Player Class Reference

```
#include <Player.h>
```

Inheritance diagram for Player:



3.28.1

**Public Member Functions** 

```
• Player (Point position, Cell ***&worldMap, int nRowCell, int nCollumnCell)
```

- ∼Player ()
- void talk (LinkedList< FarmAnimal \* > &farmAnimal, LinkedList< std::string > &mesQueue)
- void interact (LinkedList< FarmAnimal \* > &farmAnimal)
- void kill (LinkedList< FarmAnimal \* > &farmAnimal, int &nAnimal)
- void grow (LinkedList< std::string > &mesQueue)
- void mix (LinkedList< std::string > &mesQueue)
- char render ()
- void takeWater ()
- void sellAll ()
- int getMoney ()
- int getWater ()
- LinkedList< Product \* > & getInventory ()
- LinkedList< SideProduct \* > getrecipeBook ()

3.28.2 \*

Additional Inherited Members

## 3.28.3 Detailed Description

Player adalah kelas yang merepresentasikan pemain dengan semua aksinya di dunia

## 3.28.4 Constructor & Destructor Documentation

## 3.28.4.1 Player()

Constructor Player di position, recipeBook diinisalisasi dengan semua SideProduct yang terdefinisi

```
3.28.4.2 ∼Player()

Player::∼Player ( )

Destructor Player
```

#### 3.28.5 Member Function Documentation

Menumbuhkan rumput pada cell yang sedang ditempati oleh Player

```
3.28.5.3 interact()
```

Player mengambil FarmProduct dari semua FarmAnimal terdekat tanpa membunuh FarmAnimal tersebut. Bekerja untuk FarmAnimal jenis MilkProducing dan EggProducing. Contoh FarmProduct : ChickenEgg, CowMilk.

```
3.28.5.4 kill()
```

```
void Player::kill (
          LinkedList< FarmAnimal * > & farmAnimal,
          int & nAnimal)
```

Player mengambil FarmProduct dari semua FarmAnimal terdekat dengan cara membunuh FarmAnimal tersebut. Bekerja untuk FarmAnimal jenis MeatProducing. Contoh FarmProduct : CowMeat, ChickenMeat.

```
3.28.5.5 mix()
```

Menciptakan SideProduct dari FarmProduct bila Player dekat dengan mixer

```
3.28.5.6 render()
```

```
char Player::render ( ) [virtual]
```

Mengembalikan char untuk dirender ke layar

3.29 Point Struct Reference 47

Implements LivingThing.

Player berbicara dengan semua FarmAnimal terdekat.

The documentation for this class was generated from the following file:

• include/EngiFarm/Player.h

# 3.29 Point Struct Reference

```
#include <Point.h>
3.29.1 *
```

Public Attributes

- int x
- int y

# 3.29.2 Detailed Description

Point adalah suatu struktur data yang menyimpan posisi di bidang 2 dimensi

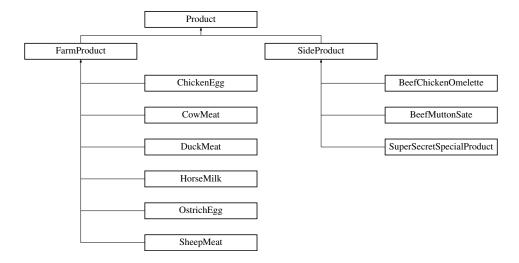
The documentation for this struct was generated from the following file:

• include/EngiFarm/Point.h

# 3.30 Product Class Reference

#include <Product.h>

Inheritance diagram for Product:



3.30.1

**Public Types** 

enum Category {
 CHICKENEGG, BEEFCHICKENOMELETTE, BEEFMUTONSATE, COWMEAT,
 DUCKMEAT, HORSEMILK, OSTRICHEGG, SHEEPMEAT,
 SUPERSECRETSPECIALPRODUCT }

3.30.2

**Public Member Functions** 

- virtual int getPrice () const =0
- virtual Category getCategory () const =0
- bool operator== (Product &P)
- bool operator!= (Product &P)

# 3.30.3 Detailed Description

Product adalah kelas abstrak yang merepresentasikan produk yang bisa dibuat dan dijual player

# 3.30.4 Member Function Documentation

#### 3.30.4.1 getCategory()

```
virtual Category Product::getCategory ( ) const [pure virtual]
```

mengembalikan kategori dari produk ini

Implemented in BeefChickenOmelette, BeefMuttonSate, SuperSecretSpecialProduct, ChickenEgg, CowMeat, HorseMilk, OstrichEgg, SheepMeat, and DuckMeat.

#### 3.30.4.2 getPrice()

```
virtual int Product::getPrice ( ) const [pure virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implemented in BeefChickenOmelette, BeefMuttonSate, SuperSecretSpecialProduct, ChickenEgg, CowMeat, HorseMilk, OstrichEgg, SheepMeat, and DuckMeat.

#### 3.30.4.3 operator"!=()

```
bool Product::operator!= (
          Product & P )
```

Mengembalikan hasil perbandingan dereference

## 3.30.4.4 operator==()

```
bool Product::operator== (
          Product & P )
```

Mengembalikan hasil perbandingan dereference

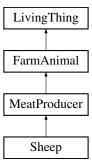
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/Product.h

# 3.31 Sheep Class Reference

```
#include <Sheep.h>
```

Inheritance diagram for Sheep:



# 3.31.1 \*

**Public Member Functions** 

- Sheep (Point position, Cell \*\*\*&worldMap, int nRowCell, int nCollumnCell)
- FarmProduct \* produceProduct (Action)
- std::string makeNoise () const
- char render ()

3.31.2 \*

Additional Inherited Members

## 3.31.3 Detailed Description

Sheep merupakan kelas turunan dari MeatProducer yang menghasilkan SheepMeat saat diinteract

#### 3.31.4 Constructor & Destructor Documentation

#### 3.31.4.1 Sheep()

Constructor

## 3.31.5 Member Function Documentation

```
3.31.5.1 makeNoise()
```

```
std::string Sheep::makeNoise ( ) const [virtual]
```

Mengembalikan suara dari Sheep

Implements FarmAnimal.

#### 3.31.5.2 produceProduct()

Mengembalikan FarmProduk yang akan dihasilkan Sheep bila Sheep di kill

Implements FarmAnimal.

```
3.31.5.3 render()
```

```
char Sheep::render ( ) [virtual]
```

Mengembalikan karakter yang merepresentasikan Sheep saat Hungry dan tidak Hungry

Implements LivingThing.

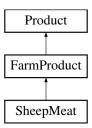
The documentation for this class was generated from the following file:

• include/EngiFarm/FarmAnimal/Sheep.h

# 3.32 SheepMeat Class Reference

```
#include <SheepMeat.h>
```

Inheritance diagram for SheepMeat:



## 3.32.1

**Public Member Functions** 

- int getPrice () const
- Category getCategory () const

# 3.32.2 \*

**Additional Inherited Members** 

# 3.32.3 Detailed Description

SheepMeat adalah kelas turunan dari FarmProduct yang dihasilkan dengan kill Sheep

## 3.32.4 Member Function Documentation

```
3.32.4.1 getCategory()
```

```
Category SheepMeat::getCategory ( ) const [virtual]
```

Mengembalikan category dari produk

Implements Product.

```
3.32.4.2 getPrice()
```

```
int SheepMeat::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

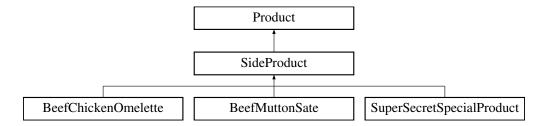
Implements Product.

The documentation for this class was generated from the following file:

• include/EngiFarm/Product/SheepMeat.h

# 3.33 SideProduct Class Reference

Inheritance diagram for SideProduct:



3.33.1 \*

**Public Member Functions** 

virtual LinkedList< Product \* > & getRecipe ()=0

3.33.2 \*

Additional Inherited Members

## 3.33.3 Member Function Documentation

3.33.3.1 getRecipe()

virtual LinkedList<Product\*>& SideProduct::getRecipe ( ) [pure virtual]

Mengembalikan resep dari produk

Implemented in BeefChickenOmelette, BeefMuttonSate, and SuperSecretSpecialProduct.

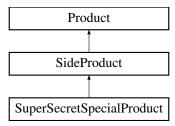
The documentation for this class was generated from the following file:

• include/EngiFarm/Product/SideProduct.h

# 3.34 SuperSecretSpecialProduct Class Reference

#include <SuperSecretSpecialProduct.h>

Inheritance diagram for SuperSecretSpecialProduct:



3.34.1

**Public Member Functions** 

- SuperSecretSpecialProduct ()
- int getPrice () const
- Category getCategory () const
- LinkedList< Product \* > & getRecipe ()

3.34.2 \*

Additional Inherited Members

# 3.34.3 Detailed Description

SuperSecretSpecialProduct adalah kelas turunan dari SideProduct yang dihasilkan dengan mix HorseMilk dan OstrichEgg

#### 3.34.4 Constructor & Destructor Documentation

## 3.34.4.1 SuperSecretSpecialProduct()

SuperSecretSpecialProduct::SuperSecretSpecialProduct ( )

Constructor untuk inisialisasi recipe

## 3.34.5 Member Function Documentation

## 3.34.5.1 getCategory()

Category SuperSecretSpecialProduct::getCategory ( ) const [virtual]

Mengembalikan category dari produk

Implements Product.

# 3.34.5.2 getPrice()

```
int SuperSecretSpecialProduct::getPrice ( ) const [virtual]
```

getPrice mengembalikan harga yang didefinisikan

Implements Product.

## 3.34.5.3 getRecipe()

```
LinkedList<Product*>& SuperSecretSpecialProduct::getRecipe ( ) [virtual]
```

Mengembalikan resep dari produk

Implements SideProduct.

The documentation for this class was generated from the following file:

• include/EngiFarm/Product/SuperSecretSpecialProduct.h

# 3.35 Truck Class Reference

```
#include <Truck.h>
```

Inheritance diagram for Truck:



3.35.1

**Public Member Functions** 

Category getCategory () const

3.36 Well Class Reference 55

3.35.2 \*

Additional Inherited Members

# 3.35.3 Detailed Description

Truck merupakan kelas turunan dari Facility yang dapat digunakan untuk menjual seluruh barang di inventori

## 3.35.4 Member Function Documentation

# 3.35.4.1 getCategory()

```
Category Truck::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

The documentation for this class was generated from the following file:

• include/EngiFarm/Cell/Truck.h

# 3.36 Well Class Reference

```
#include <Well.h>
```

Inheritance diagram for Well:



3.36.1 \*

**Public Member Functions** 

• Category getCategory () const

3.36.2 \*

Additional Inherited Members

# 3.36.3 Detailed Description

Well merupakan kelas turunan dari Facility yang digunakan untuk memberi Water untuk Player

## 3.36.4 Member Function Documentation

```
3.36.4.1 getCategory()
```

```
Category Well::getCategory ( ) const [virtual]
```

Return kategori dari objek ini

Implements Cell.

The documentation for this class was generated from the following file:

· include/EngiFarm/Cell/Well.h

# 3.37 World Class Reference

```
#include <World.h>
```

3.37.1 \*

**Public Member Functions** 

- World ()
- ∼World ()
- void Input ()
- void Update ()
- void Draw ()

3.37 World Class Reference 57

## 3.37.2 Detailed Description

World adalah kelas yang merepresentasikan dunia yang menyimpan semua Cell dan LivingThing di dalamnya

#### 3.37.3 Constructor & Destructor Documentation

```
3.37.3.1 World()
World::World ( )
```

Constructor World. Memanggil ctor dan menginisialisasi semua atribut world; Pertama, map diinisialisasi sesuai dengan spesifikasi, saat penginisialisasian map, ctor untuk object riil dari cell seperti coop, barn, dan well dipanggil Kedua, ctor Player dipanggil dengan argumen Point lokasi awal player dan reference ke map yang sudah didefinisikan pada tahap pertama Terakhir, animalList diinisialisasi dengan beberapa FarmAnimal secara random

```
3.37.3.2 \simWorld()
World::\simWorld ( )
```

Destructor World. Dealokasi seluruh Cell dan FarmAnimal, termasuk seluruh pointer yang berhubungan.

#### 3.37.4 Member Function Documentation

```
3.37.4.1 Draw()

void World::Draw ( )
```

Megambarkar representasi state program (World) seperti lokasi setiap objek, money, water, dan Inventory Player, dsb ke layar.

```
3.37.4.2 Input()

void World::Input ( )
```

Membaca input user dari stdin lalu melakukan aksi sesuai degan spesifikasi, misal, input == MOVELEFT, maka akan dipanggil pl.move(LEFT). Bila input == INTERACT, maka akan dipanggil pl.interact(animalList), dsb.

```
3.37.4.3 Update()
void World::Update ( )
```

Pada World::Update(), setiap fungsi yang dipanggil secara berkala seperti FarmAnimal::tick() akan dipanggil.

The documentation for this class was generated from the following file:

· include/EngiFarm/World.h

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